

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the previous amendments and the following remarks.

Claims 22 and 29-35 are rejected based on the belief that the subject matter "wherein the fuel reservoir is substantially totally filled with the occluding element..." is not described in the specification in such a way as to reasonably convey that the inventors had possession of the claimed subject matter. Applicants disagree.

First, Figs. 1a and 5 illustrate that the fuel reservoir 10 is substantially totally filled with the occluding element 10a. Moreover, a careful reading of the specification makes it clear that the embodiment of Figs. 1a and 1b features the fuel reservoir 10 substantially totally filled with the occluding element 10a.

In particular, it is stated in lines 12-14 of page 15 of the specification that "(a)s shown in Fig. 2, this fuel cell B is different from the above first embodiment, only in that liquid fuel in fuel reservoir 10 is stored in the free state...". It is clear from this discussion that, in the embodiment of Figs. 1a and 1b, fuel is not stored in a free state, i.e., the fuel reservoir 10 does not have any empty space for storing fuel. It necessarily follows from this that the fuel reservoir 10 of Figs. 1a and 1b is substantially totally filled by the occluding element 10a.

Considering at least these aspects of the disclosure, an ordinarily skilled artisan would have recognized that a fuel reservoir substantially totally filled with an occluding element as recited is fully supported by the present application's disclosure. Withdrawal of the rejection of Claims 22 and 29-35 under 35 U.S.C. § 112, first paragraph is therefore respectfully requested.

Before turning to the prior art rejections, a brief discussion of another embodiment of the fuel cell at issue here is provided. In the fuel cell C illustrated in Fig. 3 of the application, a fuel reservoir 15 includes a porous material or bundled fibers presenting capillarity. A fuel supply system includes a second fuel reservoir 10 above the fuel reservoir 15 storing fuel in a free state, and a valve element 12 between the fuel reservoir 15 and the second fuel reservoir 10. The valve element 12 is configured to open and close by pressing the second fuel reservoir 10, as discussed in the paragraph starting on line 21 of page 16 of the application.

Turning now to the prior art rejections, Claims 21 and 23-28 are rejected as being unpatentable over Japanese Patent Application Publication No. 2001-093551, hereinafter the Japanese reference, in view of U.S. Patent No. 5,432,023, hereinafter Yamada.

Amended Claim 21 recites a direct methanol fuel cell including, *inter alia*, a fuel reservoir which stores at least a part of liquid fuel by an occluding element formed of a porous material and/or bundled fibers presenting capillarity, and a fuel supply system for supplying liquid fuel to the fuel reservoir including a second fuel reservoir and a valve element configured to open and close by pressing the second fuel reservoir.

The Japanese reference discloses a liquid fuel vessel including a valve element 23 attached to the outflow section of a container 1. When the container 1 is connected to tubing 3, the valve element 23 is pushed up by a boss 22 within the tubing 3. The valve element 23 remains open once the container 1 is connected to the tubing 3.

The Official Action states that the Japanese reference's valve element 23 corresponds to the recited valve element. However, that valve element 23 is not configured to open and close by pressing a fuel reservoir. As discussed above, the valve element 23 instead remains open once the container 1 is connected to the tubing. Moreover, Yamada does not cure the above-noted deficiencies of the Japanese reference.

Accordingly, even assuming *arguendo* that some basis exists for combining the Japanese reference with Yamada in the manner suggested by the Official Action, that combination would not have resulted in a direct methanol fuel cell including a fuel reservoir which stores at least a part of liquid fuel by an occluding element formed of a porous material and/or bundled fibers presenting capillarity, and a fuel supply system for supplying liquid fuel to the fuel reservoir including a second fuel reservoir and a valve element configured to open and close by pressing the second fuel reservoir, in combination with the other features recited in amended Claim 21. Withdrawal of the rejection of Claim 21 is therefore respectfully requested.

The dependent claims are allowable at least by virtue of their dependence from allowable independent claims. Thus, a detailed discussion of the additional distinguishing features recited in the dependent claims is not set forth at this time.

Early and favorable action with respect to this application is respectfully requested.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful

in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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